

Notice of Allowability

Application No.

10/706,028

Examiner

Brian R. Gordon

Applicant(s)

BLANKENSTEIN ET AL.

Art Unit

1743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11-13-03.
2. ☒ The allowed claim(s) is/are 1-12.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Vincent Ramik on August 20, 2007.

The application has been amended as follows:

In the claims amend the claims as follows:

1. A device for the stepwise transport of liquid, particularly of sample liquid to be analyzed, through several reaction chambers located in series in terms of flow while utilizing capillary forces, comprising

- a channel (14) through which liquid is transportable on the basis of capillary forces, and
- at least two closed vent holes (38,40,42) which are in fluid communication via respective fluid connections (30, 32, 34) with the channel (14) at connection sites (22,24,26) spaced from each other along the channel (14),
- the connection sites (22,24,26) dividing the channel (14) into several channel sections (44,46,48),
- ~~the fluid connections between a respective channel section (44,46,48) and the vent holes (38,40,42) allocated thereto~~ being able to be opened separately, thereby allowing stepwise fluid flow into said respective channel sections (44, 46, 48), and
- at least one chamber (50,52,54) being arranged in the channel sections (44,46,48) upstream of each connection site (22,24,26) in flow direction.

4 (Currently Amended) The device according to claim 1, characterized in that said fluid connections are vent channels (30,32,34) ending in the vent holes (38,40,42) and branch off from the channel (14) at the connection sites (22,24,26).

2. The following is an examiner's statement of reasons for allowance: The prior art of record does not disclose the invention as claimed in which vent holes are separately operable to be opened sequentially to allow stepwise transport of fluid via capillary forces through the respective channel sections of the divided main channel.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bedingham; William et al.; Blankenstein, Gert et al.; Ichikawa, Yasunori et al.; Gilbert, John et al.; Bergh, H. Sam et al.; Handique; Kalyan et al.; Handique; Kalyan et al.; Demers; Robert Richard; Gropper; Andrian et al.; Gibbons; Ian et al.; Johnson; Raymond et al.; and Columbus; Richard L. disclose devices for fluid flow.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian R. Gordon whose telephone number is 571-272-1258. The examiner can normally be reached on M-F, 1st Fri. Off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

brg 

Brian R Gordon
Primary Examiner
Art Unit 1743

BRIAN R. GORDON
PRIMARY EXAMINER